An Experiment in Straw Bale Gardening

By Emma Davis
July 11, 2014

A Simple Solution

Urban gardening can be limiting. For example, a city lot might be ideal for home construction but may have poor soil for growing. In addition, home location and shady areas can compromise sites that would otherwise be suitable for gardening. Another challenge is poor draining clay soil. Straw bale gardening is a simple solution for poor soil, weedless gardening, watering, limited garden space, and even physical limitations.

Straw bale gardening requires some simple preparation. Purchase straw bales at local feed stores. Be sure to get straw, not hay, because hay is full of seeds. Straw is the hollow tubes left over after harvesting the seeds and grain.

Make the decision long before the growing season since the bales require conditioning in preparation for planting. In choosing a location to place the bales, consider sun, water source, plants to be grown and garden pests. Deer, possums, raccoons and squirrels can be challenging as they compete for your harvest.

Prepare your space and place bales in a predetermined location. Bales can be placed anywhere you have ample sunlight and water, even a sidewalk or driveway. Once the bales are wet, they will be heavy and extremely difficult to move. There is a right side up. When placing the bales, the securing twine should be horizontal to the ground. It does matter as the stalks will be in an up and down position. Since the bales are about 24 inches high, that allows the gardener to care for plants without stooping or getting on your knees.

Placing layers of newspaper and or heavy cardboard underneath the bales prevents grasses and weeds from growing up the sides of the bale.

By starting tomatoes and brassicas from seed in late February, the plants will be ready for planting when the bales are conditioned and the weather is temperate. Another alternative is to purchase starts when you are ready to plant or to seed directly into the straw bale.

An essential part of straw bale gardening is conditioning to heat up the bales and start the decomposition process over a period of about 10-12 days. Supplies needed are straw bales, ammonia sulfate, water, and sunlight.

Water the bales soaking them completely for the first three days. If you live in the Pacific Northwest, you may opt to let Mother Nature do the watering. However, bales placed under eaves have to be watered during the conditioning process. After three days of soaking, sprinkle one cup of ammonia sulfate (21-0-0) evenly over the top of each bale. Do this on days four, five and six, watering the bales thoroughly each time to soak in the fertilizer. On days seven, eight

and nine, cut the amount of fertilizer in half. No more fertilizer is needed for conditioning, but water again on day 10. On day eleven, feel the top bale to see if it has cooled to about body temperature. Once cooled to body temperature, it is all right to plant.

LEFT: Center Tomato cages in the bales to provide support for plants and, later, for floating row covers. CENTER: T-posts can be installed at both ends of the bales, then string garden twine between them to support tall plants. RIGHT: Place Layers of newspaper or heavy cardboard under the bales to help prevent grasses and weeds from growing up the sides of the bales. Center tomato cages in the bales to provide support for plants and for floating row covers. *Photos by Trish Varrelman / WSU Skagit County Master Gardeners.*

Toward the end of April, you may opt to plant the brassicas. Dig holes in the bales to allow for soil and place the starts; add some compost. Try poking some potatoes in the bales of companionable plants. For example, try red potatoes in one bale, Yukons in another and Jerusalem artichokes in a third. The potatoes will compete with the tomatoes for common nutrients, so a better choice would be in the bales of brassicas. After the harvest of plants on top of the bale, the potatoes provide a second harvest. Young children will enjoy participating in opening the bales and gathering the potatoes.

By centering tomato cages in the bales to provide support, you can protect the plants against cabbage moth with a floating row cover fabric. Insert garden staples into the bales to hold the cloth in place. Or try tucking the cloth into the twine that secures the bales. Another option would be to use stakes on either end of the bales with a wire strung between the posts to support the cover. Be creative and use what you have on hand to save on costs. Repurposing supplies on hand also saves on fuel used in driving back and forth to the store. The floating row cover allows rain and light through but deters bugs and pests like cabbage moth. Be sure to use controls for slugs and other insect pests as you would in gardens, containers and raised beds.

A combination of T posts and U posts can be used at both ends of the bales, and garden twine can be strung to provide support for the tomato plants. The metal posts are easy to handle and pound into the flower beds.

Avoid letting the bales dry out. They won't hold moisture as well as soil. Also, the plants will need a water soluble fertilizer watered in regularly since the bales alone will not provide the necessary nutrients for the plants to thrive.

Enjoy your produce fresh from the garden the same day it is harvested. Delicious and nutritious! When you are finished harvesting use the bales as mulch and or compost to enrich the soil.

RESOURCES:

- *Straw Bale Gardening*. WSU. Benton County Extension.
- *The Complete Compost Gardening Guide*. Barbara Pleasant and Deborah L.Martin . Storey Books. February 2, 2008.
- *Straw Bale Gardens: The Breakthrough Method for Growing Vegetables Anywhere, Earlier and with No Weeding*. Joel Karsten. eBook. Cool Springs Press. March 15, 2013.